Samriddha Basu

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TECHNICAL SKILLS

- Programming & Debugging (Python, Java, C#)
- Data Processing (Spark, Hadoop, numpy, pandas)
- Machine Learning (Spark ML, scikit-learn)
- Version Control (Git)
- Full Stack Web Dev (FastAPI, Flask, React)
- App Development (Android)
- Database Systems, ETL (RDBMS/SQL, NoSQL)
- LLMs (OpenAI, HuggingFace, LangChain)

EDUCATION

Master of Computing (Computer Science)   Aug 2022 — Jan 2024
School of Computing, National University of Singapore (NUS)   GPA: 4.65 / 5 (Dean's List AY23/24 Sem 1)

Bachelor of Engineering (Computer Engineering)   Aug 2015 — May 2019
Sardar Patel Institute of Technology, University of Mumbai   GPA: 8.86 / 10

CERTIFICATION

Foundation of Generative AI - Udacity   Feb 2025

Mobile Web Specialist - Google   Aug 2019

Front-End Web Developer Nanodegree by AT&T, Google, GitHub - Udacity   Nov 2018

Android Developer Nanodegree by Google - Udacity   Jan 2017

EXPERIENCE

AI Research Associate at **Dept of Computer Science, NUS**   Mar 2024 — Present
- Research and development to create a contract management platform that allows users to chat with their contracts, autofill forms, compare drafts, analyze risks and more (LangChain LLM, RAGFlow, FastAPI, React).
- Previously worked on research and development to create an automated video editing pipeline, that uses state-of-the-art advancements in AI/ML to prepare short form video content for multiple languages.

Graduate Research Assistant at **NUS Systems & Networking Lab**   May 2023 — Dec 2023
- Research and development on a Flask (Python) based webapp which provides users with investment advice based on ChatGPT's analysis of stocks and their financial indicators
- Collaborated with a small team of developers across Singapore and China, with other members working on related modules such as news impact analysis on stock prices.

Software Developer & Data Engineer at **Credit Suisse**   Jul 2021 — Jul 2022
- Used Palantir's Foundry platform for Cloud-based Big Data Analysis to work with high volume trade datasets and generate Market Risk-related insights and reports, as part of the Market Risk Technology team.
- Collaborated with colleagues spread across EMEA, APAC and the Americas via Agile Methodologies.
- I was the primary owner of a code repo/module which acted as the interface between the data pipeline and the visualization dashboards exposed to the business users and managed all deliverables for the repo.

Technology Analyst at **Credit Suisse**   Jul 2019 — Jul 2021
- (July 2020 - July 2021) Worked on a Java/Spring Boot-based backend for a Market Risk dashboard application, as part of the Market Risk Technology team. One of my major contributions was to increase the scalability manifold, with a significant reduction in the time taken by the daily task of processing the trade datasets by ~50% (from ~20 hours to ~10 hours) while removing the 5-day limit on historical data.
- (July 2019 - July 2020) Worked on a C#/.NET-based tool to manage trades in FX and Derivatives, as part of the Electronic Trade Flow Management team spread across Americas and APAC.

PROJECTS

Mystic Brush VR

Unity, XR, C# - https://thedorkknightrises.itch.io/mystic-brush-vr

A VR game for the PICO 4 standalone headset. Use a magic paintbrush to bring your creations to (virtual) reality. Initially developed as a prototype for the Lv99 + PICO VR Bootcamp in June 2023. Available on PICO Lab within the PICO Store, and on Itch.io.

Chehra – Face Recognition Attendance Management System

Android, Machine Learning, Image Processing, Django, IoT

A proof-of-concept attendance management system that supports recognition of multiple faces from classroom pictures. I was the lead Android developer working on the Teacher and Student apps.

NotePal – Material Notepad

Android, SQLite - https://play.google.com/store/apps/details?id=thedorkknightrises.notes

A beautiful Material Design note-taking experience with innovative features such as pinned and scheduled notifications, OK Google voice actions, Drive backup, etc. Available on the Google Play Store

Multi-user Adaptive Launcher for Android

Android, UX Design

A prototype launcher application for Android phones that enables multi-profile workflows on a single device, where each profile(e.g., Work, Travel) has its own list of applications and smart suggestions

PUBLICATIONS

- R. Dmello, S. Yerremreddy, **S. Basu**, T. Bhitle, Y. Kokate and P. Gharpure, "**Automated Facial Recognition Attendance System Leveraging IoT Cameras,**" *2019 9th International Conference on Cloud Computing, Data Science & Engineering (Confluence)*, Noida, India, 2019, pp. 556-561.
- S. Yerremreddy, **S. Basu**, A. Ojha and D. R. Kalbande, "**Machine Learning Approach for Diagnosis of Autism Spectrum Disorder,**" *2019 2nd International Conference on Innovative Computing and Communication (ICICC)*, Ostrava, Czechia, 2019.
  - ➤ Received Best Paper award at the conference.
- **S. Basu**, R. Gite, P. Singh and N. Raul, "**Multi-user Adaptive Launcher for Android,**" *2019 Twelfth International Conference on Contemporary Computing (IC3)*, Noida, India, 2019, pp. 1-6.

POSITIONS OF RESPONSIBILITY

- Represented college as Team Leader in the Grand Finale of the inaugural Smart India Hackathon 2017
- Teaching Assistant for Professor Prachi Gharpure, Principal of Sardar Patel Institute of Technology, for the period from Jan 2017-May 2017
- As a Microsoft Student Partner (2017-18), I was responsible for sharing my knowledge and passion for tech with fellow students, building leadership and communication skills along with technical expertise
- As Head of Technology at Entrepreneurship Cell, Sardar Patel Institute of Technology for the period Jul 2017 – Jul 2018, I was part of the core organizing committee for various events
- Worked as Mentor and one of the Lead Developers in creating the TechForSocial platform (TechForSocial.com) for showcasing innovative ways to make use of technology for social causes under Dr. Dhananjay Kalbande, Dean of Industry Relations and Head of Computer Department at S.P.I.T.

AWARDS & ACHIEVEMENTS

- Recipient of National Talent Search Examination (NTSE) Scholarship from the Government of India
- One of 1000 recipients of full scholarship from Google India and Tata Trusts for the Android Developer Nanodegree at Udacity
- One of 350 recipients of full scholarship from Google India for the Front-End Web Developer Nanodegree at Udacity
- Second runners-up at the NBF Tech Challenge 2018 organized by NMIMS and Royal Academy of Engg. UK